# Stop 5G harm to all living beings: The Science is Conclusive

Submission to the FCC on 5G Spectrum Frontiers by Susan Clarke July 14, 2016

#### Dear FCC Commissioners:

As an expert in RFR bioeffects, I know 5G is NOT the "national priority" that the wireless industry claims. 5G is for wireless video downloading. The far greater national priority is the protection of the human brain - and every cell in the body - from the pulse-modulated, millimeter-microwave radiation that 5G uses - along with an unprecedented, intense density of infrastructure: antennas deploying radiation from every lightpole - and even more.

As far back as 1997, top public health scientists called halt to the PCS phone system in the basis of the biological plausibility of harm its pulsed centimeter microwave radiation would do to human health. (See attachments.) Alongside that petition stood an official letter to the National Academy of Sciences from Harvard School of Public Health Professor and then Environmental Health Department Chair Joseph Brain ScD stating that the heavy density of antennas required even in residential areas would be harm human health. But the FCC did not listen, and instead plunged our society deep into the predictable ADD/ADHD, dementias, headaches, sleeplessness, cardiac and blood-pressure problems, birth defects and cancer that pulse-modulated microwave radiation is known to cause. And now, the far more intense density of 5G antennas literally everywhere would produce, if permitted, even more pronounced disability and debility, along with environmental devastation.

The wireless "revolution", with its unnatural, pulsed microwave radiation deployed from every cell tower, not to mention home, school and office, has simultaneously devastated bird and bee populations, undermining the very potential for the growth of certain fruits, nuts and vegetables. Einstein said that, when the bees die, humans would have about 4 more years.

The corporation wishing to deploy 5G, a horrific imposition of pulse-modulated millimeter microwave radiation upon every private and public property in the US, would do great harm to human health and the environment, particularly to the more vulnerable of species and persons. Your duty is not to this corporation, Spectrum Frontiers, but rather to the people of the United States, to our lives and to all life.

I urge your NO vote on Spectrum Frontiers' proposition. NEPA review of the environmental and human health impacts of moving forward with 5G has been avoided, because FCC knows 5G could pass no NEPA test. FCC has acted egregiously toward Americans and the environment by promulgating rules for 5G while aware of its human and environmental harm. The knowledgeable scientific community stands within consensus that the existing FCC limits for wireless radiation do not protect the population from biological effects (<a href="https://www.EMFscientist.org">www.EMFscientist.org</a>). Even the original ASTM/IEEE Committee that set the FCC guidelines knew they were unprotective, because of the 120 studies chosen in 1991 to prove safety, 15 actually concluded harm to have occurred at exposure levels less than the guidelines'! Indeed, some of these studies concluded harm at more than 10 times lower levels, proving harm rather than safety. So this quite well established. Moreover, in most every human-occupied structures, radiation levels in any case already exceed FCC limits, sometimes by many orders of magnitude. There is simply no room for even more

intense - far more intense - 5G radiation, deployed from an unprecedentedly high density of antennas.

The National Toxicology Program recently release results, as previously demonstrated by other researchers, showing that radiofrequency radiation (RFR) both breaks DNA and causes cancer (<a href="http://www.saferemr.com/2016/05/national-toxicology-progam-finds-cell.html">http://microwavenews.com/2016/05/national-toxicology-progam-finds-cell.html</a> and http://microwavenews.com/news-center/ntp-nyt). Furthermore, the literature on RFR in the extreme high frequency, millimeter, bands required for 5G concludes DNA breakages, serious cellular resonance effects, and other detrimental metabolic effects

(http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec15 2012 Evidence Disruption M odulation.pdf andhttp://www.stopglobalwifi/documents/2001\_kositsky\_et\_al.\_-\_ussr\_review.pdf).

Non-industry-funded studies have consistently found links between RFR and various adverse biological effects (<a href="www.bioinitiative.org">www.bioinitiative.org</a>). These include serious neurological, cardiac, and metabolic effects, as well as the DNA breakage that leads to cancer and genetic defects (<a href="http://www.mainecoalitiontostopsmartmeters.org/?p=1469">http://www.mainecoalitiontostopsmartmeters.org/?p=1469</a>).

Studies including those of the National Toxicology Program have shown wireless deployment to be a hazardous. According to FCC Chairman Wheeler, 5G is an infrastructure-intensive technology. It is in reality an infrastructural nightmare, one that will impair to some extent every person's (and animal's) sleep, cognition, metabolism and more.

I urge you to invest in safe, wired infrastructure rather than spending taxpayer money to saturate entire communities with hazardous radiation.

Please see "Wireless Technology Violates Human Rights" (<a href="http://www.electricalpollution.com/documents/WirelessViolatesHumanRights2016.pdf">http://www.electricalpollution.com/documents/WirelessViolatesHumanRights2016.pdf</a>) for more information about the very serious ways in which wireless radiation violates human rights.

Do NOT unleash another hazardous environmental pollutant upon your friends, family, constituents, animals, or plantlife. Vote courageously to protect living beings: vote NO on Spectrum Frontiers' 5G.

With gratitude in advance for your well considered vote for life,

Susan Clarke

See Below the 1996 Petition

We the undersigned physicians and scientists call upon public health officials to intervene to halt the initiation of communication transmissions employing ground level, horizontally transmitted, pulsed microwaves in Boston. This form of transmission is scheduled to begin in June, 1997, by the Sprint Corporation for personal communications systems (PCS). Given the biological plausibility of negative health impacts, particularly to the human nervous system, as well as anecdotal evidence of illness and death from such exposures in cities where transmission has already been implemented, and voluminous medical studies indicating human and ecological harm from microwaves, we urge the suspension of that implementation pending full public notification of its potential hazards and the full review and determination of its safety by the scientific community.

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Send completed petition to ENHALE (Environmental Health Advocacy League), Box 425, Concord, MA 01742. For information, or to receive the 85 page literature review, Microwaving Our Planer, contact. Arthur Firstenberg, (718) 434-4499.

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